

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT) -

(51) International Patent Classification <sup>7</sup> :  C07K 14/00		(11) International Publication Number:  WO 00/44772
A2		(43) International Publication Date:  3 August 2000 (03.08.00)
<p>(21) International Application Number: PCT/GB00/00257</p> <p>(22) International Filing Date: 31 January 2000 (31.01.00)</p> <p>(30) Priority Data: 9902000.0 30 January 1999 (30.01.99) GB</p> <p>(71) Applicant (for all designated States except US): DELTA BIOTECHNOLOGY LIMITED [GB/GB]; Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): VAN URK, Hendrik [NL/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). MEAD, David, John [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). MORTON, Philip, Harvey [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). CARTWRIGHT, Andrew, John [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). CAMERON, Jason [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). BALLANCE, David, James [GB/US]; Aventis Behring, 1020 First Avenue, P.O. Box 61501, King of Prussia, PA</p>		
<p>19406-0901 (US). GRANDGEORGE, Michel, Gaston, Joseph [FR/DE]; Aventis Behring GmbH, P.O. Box 1230, D-35002 Marburg (DE). BEREZENKO, Stephen [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). WOODROW, John, Rodney [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). SLEEP, Darrell [GB/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB). VERON, Jean-Luc, Bernard [FR/GB]; Delta Biotechnology Limited, Castle Court, 59 Castle Boulevard, Nottingham NG7 1FD (GB).</p> <p>(74) Agent: BASSETT, Richard, S.; Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).</p> <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p>		
<p><b>Published</b> Without international search report and to be republished upon receipt of that report.</p>		
<p>(54) Title: PROCESS</p> <p>(57) Abstract</p> <p>A process is provided for the preparation of a highly pure albumin solution the process comprising subjecting albumin (preferably expressed and secreted by transformed yeast) to a series of chromatographic steps. Preferably, the process comprises the steps of positive mode cation exchange chromatography, positive mode anion exchange chromatography, positive mode affinity chromatography, negative mode affinity chromatography (preferably using immobilised aminophenylboronic acid), negative mode cation exchange chromatography, and negative or positive mode anion exchange chromatography. A process for reducing the level of nickel in an albumin solution is also disclosed, as is a recombinant albumin coding sequence comprising two or more in-frame translation stop codons. Also disclosed is a process for producing recombinant albumin, the process comprising culturing a fungal cell expressing a recombinant albumin coding sequence, wherein the cell has a reduced capacity of mannosylation of the recombinantly-expressed albumin.</p>		